



Health

Ms Liz Livingstone
Chief Executive Officer
IPART NSW
PO Box K35
HAYMARKET POST SHOP NSW 1240

Your ref D19/29725

Our ref M19/ 6520

Dear Ms Livingstone

I refer to your request for a submission on a variation from Solo Water Pty Ltd for the network operator's licence for the Catherine Hill Bay Scheme, and a new network operator and retail supplier's licence application from Kyeema Wastewater Pty Ltd. The response is divided into comments specific to each scheme and those relevant to both.

Comments on Solo Water's application

The variation is to allow recycled water to be used for construction and maintenance activities, and to expand the area of operations so excess recycled can be transferred to a Central Coast wastewater treatment plant. NSW Health notes that the previous variation, which included discharge of excess recycled water to the environment via constructed wetlands, has been withdrawn. NSW Health notes there are no proposed changes to the drinking water services.

NSW Health requests that all new uses are subject to risk assessment with relevant stakeholders to ensure the risks are appropriately managed. The risk assessment must be specific to the source, treatment processes and end uses for each scheme, considering the required log reduction values (LRVs) for each end use, associated risks and whether any additional controls are required. For end uses not considered in the *Australian Guidelines for Water Recycling*, an exposure assessment is necessary to determine the required LRVs.

The granting of a licence under the *Water Industry Competition Act 2006* does not automatically exempt the applicant from the requirement under the *Public Health Act 2010* and *Public Health Regulation 2012* to develop and adhere to a drinking water management system.

Comments on Kyeema Wastewater's application

The proposed scheme is located within the Yass Valley Council local government area at Gundaroo. The application is to collect, store and treat sewage for irrigation of non-edible crops or pasture. This should be carried out in accordance with the *Australian Guidelines for Water Recycling*, including consultation with relevant stakeholders.

NSW Health has concerns regarding Kyeema Wastewater's application and understanding of the relevant guidelines. Although the Sewage Management Plant states the preliminary recycled water risk assessment was done in accordance with the *Australian Guidelines for Water Recycling*, the risk assessment does not include the residual likelihood and consequence to justify the residual risk being assessed as 'low'. There is also inconsistency

in the terminology used in the application with reference to both water recycling and effluent disposal.

The Sewage Management Plan refers to sub-surface irrigation when determining the assumed log reduction values for the scheme but also states that heavy droplet spray irrigation may be used for the site. The Sewage Management Plan also notes that the diversion of an intermittent watercourse, to ensure wet weather storage, is subject to Office of Water approvals. NSW Health requests the applicant clarify the proposed end use, whether irrigation will be sub-surface and how wet weather storage will function to protect public health if approvals are not obtained.

Appendix A of the Sewage Management Plan refers to a "flush-and-forget" service, however NSW Health is unclear about the responsibility for infrastructure including wall mounted panels on each allotment and manholes. NSW Health requests the applicant clarify who is responsible for inspections, maintenance and repairs for this infrastructure and how this will be undertaken. NSW Health also recommends that the applicant ensure users are aware of, and agree to, any requirements to manage the risk. This could include providing information to home owners as misuse can result in system failure.

NSW Health requests that IPART require a risk assessment with relevant stakeholders to ensure that public health risks, such as sewer overflows, are managed. The risk assessment should consider the potential impact to residents, including odour, if the irrigation system became clogged and the potential for effluent to resurface or run-off during wet-weather. It is also noted that sheep may be grazed in the irrigated area which could damage fittings.

NSW Health notes that Innoflow Australia will be contracted for the design, construction, operation and maintenance of the sewage system for the first five years. NSW Health recommends that Kyeema Wastewater ensure that Innoflow Australia staff have appropriate expertise for the ongoing management of the scheme.

Comments relevant to both schemes

I request that NSW Health is consulted during risk assessments, development of management plans and development of incident notification protocols for drinking water and recycled water. NSW Health expects the applicant to provide an invitation to attend risk assessments. NSW Health recommends that reviews are conducted with relevant stakeholders including NSW Health, IPART and the Environment Protection Authority.

NSW Health also requests the management plans and incident notification protocols for drinking water, sewage and recycled water are updated in consultation with NSW Health if details of the scheme change.

NSW Health's response should not be considered an approval or endorsement of the applicant's documentation. NSW Health's review has focused on potential public health issues. NSW Health expects that the audit process will confirm the adequacy of the drinking water, sewage and recycled water management plans and compliance with the *Australian Drinking Water Guidelines* and *Australian Guidelines for Water Recycling*.

Thank you for the opportunity to make a submission. Should officers of IPART require further information, please contact Dr Katrina Wall, A/Manager Water Unit on [REDACTED]
Should the applicant require further information they may contact the relevant Public Health Unit contact for the scheme.

Yours sincerely



Dr Paul Byleveld PSM
A/Director Environmental Health Branch

12 February 2020